Nel 1.25

Work Order ID 77684

77684

Friday, December 16, 2011 12:47:49 PM

Item ID: D3417-5

Accept *N900040100*

Setup **Start** *NS1* **Stop** *NS2*

Revision ID:

Item Name: Washer

Start Date: 12/16/2011 **Start Qty:** 40.00 *40*

Required Date: 1/6/2012 **Req'd Qty:** 40.00 *40*

Cust Item ID:

Customer:

Reference:

Run **Start** *NR1* **Stop** *NR2*

Approvals: **Process Plan:** [signature] **Date:** 1-9-11 **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D3417	**Revision Nbr** Rev E								
100 *100* Doosan Doosan Lathe	Hardinge CNC LATHE SMALL **Memo** 1-Turn as per Folio FA761 Rev: E & Dwg D3417 Rev: E 2-Deburr	0.00 0.00 SA 12/1/9				44	Ø		
110 *110* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB **Memo**	0.00 0.00 SA 12/1/9				44	Ø		
120 *120* QC Quality Control	QC8- Inspect parts - second check **Memo**	0.00 0.00 amk 12/01/09				44	Ø		

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ PAR #: _______ Fault Category: __________________ NCR: Yes No DQA: _____ Date: _________

Resolution: ____________________ Disposition: ____________________ QA: N/C Closed: _________ Date: _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 77684 *77684*

Friday, December 16, 2011 12:47:49 PM

Item ID: D3417-5 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Washer

Start Date: 12/16/2011 **Start Qty:** 40.00 *40* **Cust Item ID:**

Required Date: 1/6/2012 **Req'd Qty:** 40.00 *40* **Customer:**

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: 42 Memo	0.00 0.00				12/1	12		44
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							12/1/12

MJF 12-01-12

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W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** _________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	**STEP**	**Description of NC** Section A	**Initial** Chief Eng	**Action Description** Chief Eng	**Sign & Date**	**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector

NOTE: Date & initial all entries

Picklist Print

Friday, December 16, 2011 12:47:54 PM

Work Order ID: 77684

77684

Parent Item: D3417-5

D3417-5

Parent Item Name: Washer

Start Date: 12/16/2011 **Required Date:** 1/6/2012

Start Qty: 40.00 **Required Qty:** 40.00

Comments: IPP Rev:ANew issue08-07-09 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDELRINR1.2500		Purchased	No			110	f	27.1490	0.0296	1.246316			

MDELRINR1.2500

DELRIN ROUND BAR 1.25"

Location	Loc Qty	Loc Code
MAT055	27.149	
114586	3.149	
119133	24	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ___________________ **Disposition:** ___________________ **QA: N/C Closed:** _________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	77884
Description: Washer	**Part Number:**	**D3417-5**
Inspection Dwg: D3417 **Rev:** E		**Page 1 of 1**

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø1.125	+0.030/-0.000	1.135	✓			
Ø0.641	+0.008/-0.001	Ø.643	✓			
0.120	+0.010/-0.000	.125	✓			
0.810	+0.010/-0.000	.815	✓			
0.251	+/-0.010	.251	✓			
R2.00	+/-0.030	R.200	✓			

Measured by: [signature] **Date:** 12/1/9

Audited by: [signature] **Date:** 12/01/09

Preliminary Approval: **Date:**

Rev	Date	Change	Revised by	Approved
A	09.05.04	New Issue	KJ/DD	
B	10.11.12	Dwg Rev updated	KJ	

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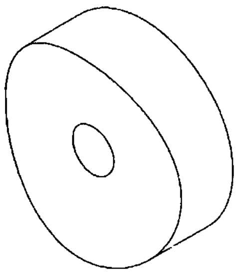
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

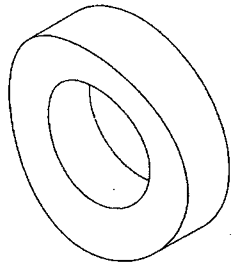
Resolution: ____________ **Disposition:** ____________ **QA: N/C Closed:** ________ **Date:** ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

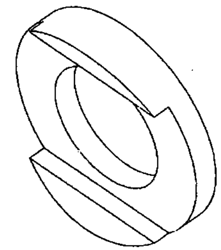
NOTE: Date & initial all entries



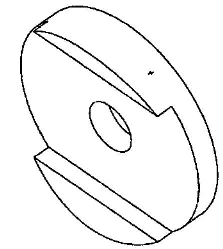
D3417-1 WASHER



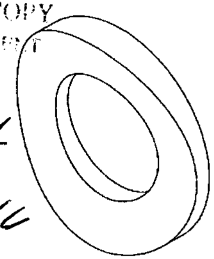
D3417-3 WASHER



D3417-5 WASHER



D3417-7 WASHER



D3417-9 WASHER (F)

NOTES:
1) MATERIAL: BLACK DELRIN II 150E OR ACETRON GP ACETAL, ROD
REF DART SPEC M-DELRIN-R
OR BLACK DELRIN II 150E OR ACETRON GP ACETAL, BAR
REF DART SPEC M-DELRIN-B
OR BLACK DELRIN II 150E OR ACETRON GP ACETAL, SHEET
REF DART SPEC M-DELRIN-S
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: D3417-1, 0.020 lbs
D3417-3, 0.010 lbs
D3417-5, 0.010 lbs
D3417-7, 0.010 lbs
D3417-9, 0.004 lbs

REV.	DESCRIPTION	BY	DATE
F	ADD D3417-9 (ZN B5-3)	SC	10.07.26
E	ADD D3417-7 (ZN A2-2)	RF	09.06.30
D	ADD -5 WASHER (ZN B2-1, B2-2); REFORMAT TO "B" SIZE & UPDATE TO CURRENT STANDARDS; REASON: INSTALLATION OF NEW TOW RING	AJS	08.07.08
C	REMOVE CBORE, WIDEN	PH	05.06.30
B	CHANGE TO ROUND WASHER	PH	05.06.10
A	NEW ISSUE	PH	05.03.31

DESIGN	SC	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	SC	
CHECKED		DRAWING NO. D3417 — REV. F — SHEET 1 OF 3
MFG. APPR.		
APPROVED		TITLE WASHER — SCALE NTS
DE APPR.		
DATE	10.07.26	

Dart Aerospace Ltd

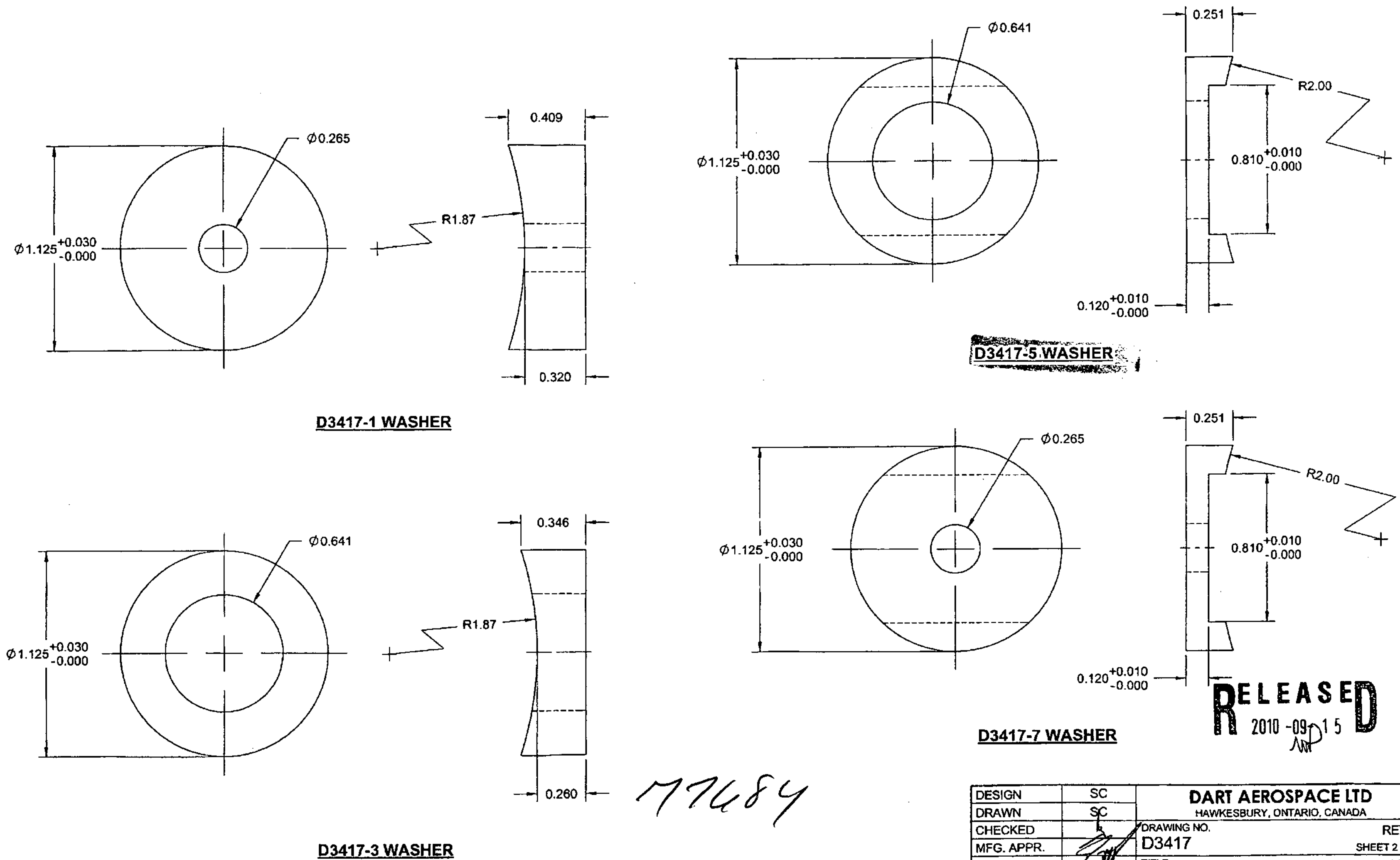
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ PAR #: ______ Fault Category: ____________ NCR: Yes No DQA: _____ Date: ________

Resolution: ____________ Disposition: ____________ QA: N/C Closed: ________ Date: ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	SC	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	SC	DRAWING NO. D3417 — REV. F — SHEET 2 OF 3
CHECKED		
MFG. APPR.		TITLE: WASHER — SCALE: NTS
APPROVED		
DE APPR.		
DATE	10.07.26	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

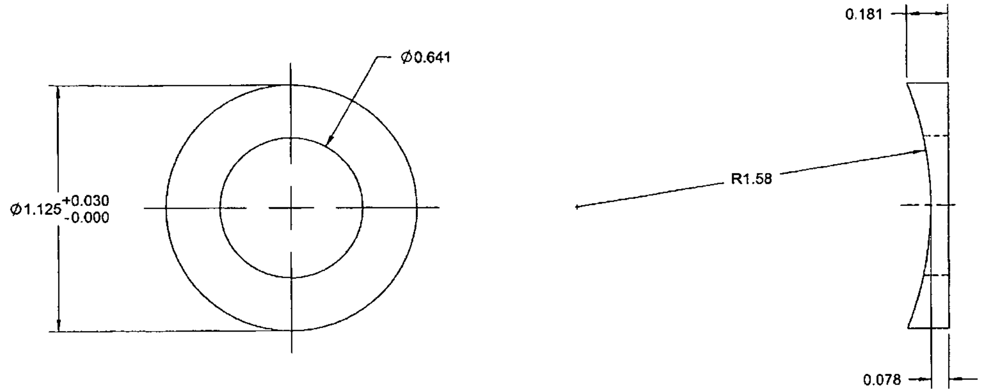
Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

Resolution: ____________________ **Disposition:** ____________________ **QA: N/C Closed:** _________ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE



D3417-9 WASHER (F)

77684

RELEASED 2010-09-15

DESIGN	SC	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	SC	DRAWING NO. D3417 — REV. F — SHEET 3 OF 3
CHECKED		
MFG. APPR.		
APPROVED		TITLE WASHER — SCALE NTS
DE APPR.		
DATE	10.07.26	

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ PAR #: ______ Fault Category: ____________ NCR: Yes No DQA: _____ Date: ________

Resolution: ____________ Disposition: ____________ QA: N/C Closed: ________ Date: ________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries